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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,545	12/17/1999	DARRYL L. GAMEL	96794DIV3	1308

7590

07/16/2003

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EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 07/16/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

EC

**Office Action Summary**

Application No.

09/466,545

Applicant(s)

GAMEL ET AL.

Examiner

A. Dexter Tugbang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,5-7,9,54-60,62-64 and 71-73 is/are pending in the application.
- 4a) Of the above claim(s) 6,55-60 and 71-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5,7,9,54 and 62-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14,15,16,17                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Species A, Claims 3, 5, 7, 9, 54 and 62-64 in Paper No. 19 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 6, 55-60 and 71-73 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 20.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 54 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent No. 6,332,269. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of Claim 54 of the instant application are inclusive of the limitations of Claim 21 of

Art Unit: 3729

U.S. Patent 6,332,269 with the exception of the component having a fiducial physical asymmetry. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the component of the instant application with a "fiducial physical asymmetry" in order to place the component on the substrate.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 54 and 62-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 54, the phrases of "the alignment" (line 4) and "the detected alignment" (line 5), each lack positive antecedent basis.

In Claim 62, the phrase of "the physical shape" (line 3) lacks positive antecedent basis. It is unclear if this phrase is referring to the previous recitation of "alignment-indicating physical shape" (line 2).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3729

8. Claims 3, 5, 7, 54 and 62-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawatani 4,733,462.

Regarding Claims 3 and 54, Kawatani discloses a method of placing a component comprising: placing the component 7 into a nest (IC alignment unit 21) having an asymmetrically shaped recess 22 (in Fig. 1); detecting whether the physically asymmetric marker on the component mates with asymmetric shaped recess 22 and comparing the alignment of the component (see col. 4, lines 45+); and placing the component on the substrate 1 when mating of the physically asymmetric marker with the asymmetrically shaped recess is detected (see Figs. 2-4). The claimed “physically asymmetric marker” of the component is broadly read as the top surface area of the component 7.

Regarding Claims 5 and 7, the positioning pin 13 enables the component to be distinguished when the component is in predetermined alignment and also senses when the component contacts an upper surface of the recess (shown in Fig. 6).

Regarding Claim 62, the claimed “fiducial marker” of the component is broadly read as the top surface area of the component 7.

Regarding Claim 63, Kawatani further shows that (in Fig. 6), the top surface of the component 7, extends beyond the upper surface of the recess 22, which is detected.

Regarding Claim 64, Kawatani further teaches that the recess corresponds to a beveled edge (anyone of the leads of the component 7) of the component 7.

Art Unit: 3729

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawatani in view of Sakaguchi et al 5,628,110.

Kawatani discloses the claimed manufacturing method as previously discussed, further including determining whether the fiducial marker is mated. Kawatani does not teach the specific steps of directing, receiving and comparing the radiation pattern.

Sakaguchi teaches directing, comparing and receiving a pattern of radiation (shown in Fig. 2) for the purpose of disregarding defecting components (see col. 6, lines 13+).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Kawatani by including the process steps of Sakaguchi, to positively disregard defective components.

### ***Response to Arguments***

11. Applicant's arguments (in Paper No. 12) filed 11/15/01 regarding the Double Patent Rejection have been considered but are moot in view of the new ground(s) of rejection set forth above.

Art Unit: 3729

***Conclusion***

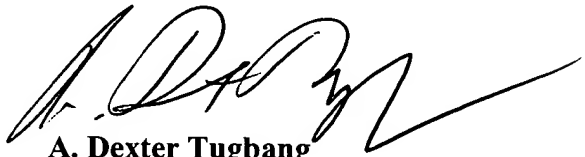
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599.

The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

  
**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

July 14, 2003